

## AMENDMENTS TO THE CLAIMS

Upon entry of this amendment, the following listing of claims will replace all prior versions and listings of claims in the pending application.

### IN THE CLAIMS

Please amend claims 1-3, 7-9, 13-17, 19-20 and 24, and add new claims 25-30 as follows:

1. (Currently Amended) A method of providing service level management in a network, wherein a service associated with the network is composed of one or more network components and a business process associated with the network is composed of the service, the service ~~affects~~ supports operation of ~~a the business process operation related in connection with the~~ the network, the method comprising the steps of:
  - ~~collecting data, on component parameters for the one or more network components, each of the component parameters having a state,~~
  - selecting one or more component parameters, the one component parameter providing an indication of an operational characteristic of a selected network component, the selected network component performing an operation in support of the service supporting the business process under service level management in association with a service level management domain;
  - ~~declaring the selected one or more component parameters a service parameter, each of the service parameters having a state, representative of the service;~~
  - declaring a service parameter having a state representative of a measure of performance of the service supporting the business process under service level management in association with the service level management domain, the state having a value used to determine conformity to an agreed upon service level; and
  - determining how the selected component parameter has an effect on the state of the service parameter to provide service level management of the business process in association with the service level management domain.
  - ~~determining how the one or more service parameters is influenced by the other component parameters to provide service level management in the network.~~

2. (Currently Amended) The method of claim 1, ~~wherein the step of determining further comprises~~ comprising the step of, representing how the component parameter has an effect on the one or more service parameters is influenced by the other component parameters in one or more of:

- a decision tree;
- a propositional statement;
- a quantified statement;
- a weighted listing; and
- a graph.

3. (Currently Amended) The method of claim 1, further comprising ~~wherein the step of determining comprises one or more processes~~ a process to determine how the component parameter has an effect on the one or more service parameters is influenced by the other component parameters to provide service level management, the process including comprising one or more of:

- a data mining based process;
- a neural network based process;
- a machine learning based process;
- an IDS derivative (iterative dichotomizing third) based process;
- an algorithm based process; and
- a selected statistical based process.

4. (Canceled)

5. (Canceled)

6. (Previously Presented) The method of claim 1, wherein the service parameter of the service represents at least one of,

- a response time of a network resource;
- traffic congestion of a selected portion of the network;
- availability of a network resource;

reliability of a network resource;  
security of a network resource;  
performance of a network resource; and  
configuration of a network resource.

7. (Currently Amended) The method of claim 1, wherein ~~the one or more of the~~ network components is associated with a network component monitoring agent of a network management system.

8. (Currently Amended) The method of claim 7, ~~wherein the step~~ further comprising the step of determining interfaces between one of the network components and ~~with the network component monitoring agent to provide service level management in the network.~~

9. (Currently Amended) A method of implementing service level management associated with a service level management domain in a network having one or more network entities addressable by the network to manage a service supporting operation of a business process related to the network ~~associated with the network~~, the method comprising the steps of,  
identifying a plurality of component parameters associated with the one or more network entities;

designating one of the plurality of component parameters a service parameter, the service parameter providing an indication of a state of the service supporting a business process under service level management in association with a service level management domain ~~associated with the network~~; and

determining from using the service parameter to a level of the service to implement service level management in the network to manage the service associated with the network in order to provide service level management of the business process in association with the service level management domain, the level of the service indicative of a measure of performance of the service.

10. (Previously Presented) The method of claim 9, further comprising the steps of,

storing the plurality of component parameters associated with the one or more network entities in a storage device; and

taking an action using the stored component parameters to determine how the plurality of component parameters affect the service parameter to manage the service associated with the network.

11. (Previously Presented) The method of claim 9, further comprising the step of managing the network based on the state of the service indicated by the service parameter.

12. (Previously Presented) The method of claim 9, further comprising the step of instructing the one or more network entities addressable by the network to take an action based on the state of the service indicated by the service parameter.

13. (Currently Amended) The method of claim 12, further comprising the step of interfacing with ~~another~~ a management platform associated with the network to manage the service associated with the network.

14. (Currently Amended) A device readable medium holding device executable instructions for executing a method of providing service level management in a network, wherein a service associated with the network is composed of one or more network components and a business process associated with the network is composed of the service, the service ~~affects~~ supports operation of ~~a the business process operation related the to to the~~ the business process operation related to the network, the method comprising the steps of:

~~collecting data on component parameters for the one or more network components, each of the component parameters having a state;~~

~~selecting one or more component parameters from the component parameters, the~~ one component parameter providing an indication of an operational characteristic of a selected network component, the selected network component performing an operation in support of the service supporting the business process under service level management in association with a service level management domain;

~~declaring the selected one or more component parameters a service parameters,~~  
~~each of the service parameters having a state representative of the~~ a measure of performance of  
~~the service supporting the business process under service level management in association with the~~  
~~service level management domain, the state having a value used to determine conformity to an agreed~~  
~~upon service level; and~~

determining how the selected component parameter has an effect on the state of  
the service parameter to provide service level management of the business process in association  
with the service level management domain.

~~determining how the service parameters are influenced by the other component~~  
~~parameters to provide service level management of the network.~~

15. (Currently Amended) The medium of claim 14, ~~wherein the step of determining~~  
~~further comprising comprises~~ the step of, representing how the component parameter has an effect  
on the service parameters are influenced by the other component parameters in one or more of:

- a decision tree;
- a propositional statement;
- a quantified statement;
- a weighted listing; and
- a graph.

16. (Currently Amended) The medium of claim 14, ~~wherein the step of determining~~  
~~further comprising comprises one or more a processes to determine how the component~~  
~~parameter has an effect on the service parameters are influenced by the other component~~  
~~parameters to provide service level management , the process including one or more of :~~

- a data mining based process;
- a neural network based process;
- a machine learning based process;
- an IDS derivative (iterative dichotomizing third) based process;
- an algorithm based process; and
- a selected statistical based process.

17. (Currently Amended) The medium of claim 14, wherein the ~~state representative of the service associated with the selected one or more~~ service parameters of the service represents at least one of,

- a response time of a network resource;
- traffic congestion of a selected portion of the network;
- availability of a network resource;
- reliability of a network resource;
- security of a network resource;
- performance of a network resource; and
- configuration of a network resource.

18. (Previously Presented) The medium of claim 14, wherein the one or more network components is associated with a network component monitoring agent of a network management system.

19. (Currently Amended) The medium of claim 18, ~~wherein the~~ further comprising the step of determining interfaces between the network component and ~~with~~ the network component monitoring agent to provide service level management in the network.

20. (Currently Amended) A device readable medium holding device executable instructions for executing a method of implementing service level management associated with a service level management domain in a network having one or more network entities addressable by the network to manage a service supporting operation of a business process related to the network ~~associated with the network~~, the method comprising the steps of,

- identifying a plurality of component parameters associated with the one or more network entities;

- designating one of the plurality of component parameters a service parameter, the service parameter providing an indication of a state of the service supporting a business process under service level management in association with a service level management domain ~~associated with the network~~; and

determining from using the service parameter to a level of the service under service level management to implement service level management in the network to manage the service associated with the network in order to provide service level management of the business process in association with the service level management domain, the level of the service indicative of a measure of performance of the service.

21. (Previously Presented) The medium of claim 20, further comprising the steps of, storing the plurality of component parameters associated with the one or more network entities in a storage device; and taking an action using the stored component parameters to determine how the plurality of component parameters affects the service parameter to manage the service associated with the network.

22. (Previously Presented) The medium of claim 20, further comprising the step of managing the network based on the state of the service indicated by the service parameter.

23. (Previously Presented) The medium of claim 20, further comprising the step of instructing the one or more network entities addressable by the network to take an action based on the state of the service indicated by the service parameter.

24. (Currently Amended) The medium of claim 23, further comprising the step of interfacing with ~~another~~ a management platform associated with the network to manage the service associated with the network.

25. (New) The method of claim 1, wherein the service level management domain comprises a plurality of management applications integrated into a hierarchical structure having a plurality of layers.

26. (New) The method of claim 1, wherein the network component comprises one or more of:

a transmission device,  
a transmission media,  
a computer system, and  
an application.

27. (New) The method of claim 9, wherein the service level management domain comprises a plurality of management applications arranged in a hierarchical manner.

28. (New) The method of claim 9, wherein the network component comprises one or more of:

a transmission device,  
a transmission media,  
a computer system, and  
an application.

29. (New) The medium of claim 14, wherein the service level management domain comprises a plurality of executable applications arranged in a hierarchical manner.

30. (New) The medium of claim 20, wherein the service level management domain comprises a plurality of executable applications performing a plurality of functions in a hierarchical manner.